

HANDOUT-PROF-DEV-Ground-Truthing-AI- Critical Thinking About Technology Hype

A. Core Readings

1. Zitron, Ed. "The Hater's Guide To The AI Bubble." *Ed Zitron's Where's Your Ed At*, July 21, 2025. <https://www.wheresyoured.at/the-haters-gui/>.
2. Edwards, Benj. "Why ChatGPT and Bing Chat Are so Good at Making Things Up." *Ars Technica*, April 6, 2023. <https://arstechnica.com/information-technology/2023/04/why-ai-chatbots-are-the-ultimate-bs-machines-and-how-people-hope-to-fix-them/>.
3. Stanford HAI. "AI on Trial: Legal Models Hallucinate in 1 out of 6 (or More) Benchmarking Queries." July 26, 2025. <https://hai.stanford.edu/news/ai-trial-legal-models-hallucinate-1-out-6-or-more-benchmarking-queries>.
4. Parcak, Sarah. "Satellite Remote Sensing for Archaeology with Dr Sarah Parcak and Debunking the Pyramid Fake Claims." Interview by Flint Dibble. April 3, 2025. YouTube. <https://www.youtube.com/watch?v=lyhdmj6WGX8>.

Full bibliography: Fools for Backwards Design Zotero Group, Ground Truthing AI Collection: <https://www.zotero.org/groups/6084929/foolsforbackwardsdesign/collections/L8ZNAIVZ>

B. Your Questions About the Readings or Lecture

Question 1:

Question 2:

Question 3:

C. Discussion Questions

1. **Distinguishing Hype from Reality:** Ed Zitron reports that big tech companies will spend "\$560 billion to generate approximately \$35 billion in revenue" by end of 2025 (Zitron 2025). How can we teach faculty to evaluate technology claims based on economic sustainability rather than marketing promises?
2. **Regional Economic Protection:** When companies promise to bring AI jobs to our service region, how should we, as a community college, help their service regions evaluate these claims? What questions should we help community leaders ask about infrastructure costs, training requirements, and long-term viability?
3. **Preparing for Both Scenarios:** Given that AI might be transformative or might crash, how should we structure our curriculum and institutional planning to serve our region regardless of outcome? What skills remain valuable in both scenarios?
4. **Hallucinating "Labor":** Stanford HAI found that "AI legal models hallucinate in 1 out of 6 (or more) benchmarking queries" (Stanford HAI 2025). What is your tolerance for (agent) hallucination (or flakiness) in your area? What is *at stake* for you and yours?
5. **Economic Literacy for Students:** OpenAI "spends \$2.25 to make \$1" according to financial analysis (Zitron 2025). Further, Ed Zitron reports that big tech companies will spend "\$560 billion to generate approximately \$35 billion in revenue" by end of 2025 (Zitron 2025). How can we teach students to evaluate the business models behind technology companies making promises about their futures? What problems have or might we into?
6. **Faculty Development Strategy:** How should we train administrators, staff, and faculty to recognize and respond to ANI vendors trying to sell us, our students, and our service region on it being the "next big thing that will keep us growing" while avoiding technophobia (irrational fear of technology), being hookwinked by marketers as well as FOMO, and technophilia (uncritical embrace of technology)?

D. Question and Reflection

Question 1:

Question 2:

Question 3:

E. Glossary

Term	Definition
ANI (Artificial Narrow Intelligence)	Current AI systems that perform specific tasks well but cannot think generally like humans; what we actually have now rather than the AGI (human-level AI) promised in marketing (Imler 2025).
AGI (Artificial General Intelligence)	Hypothetical future AI systems that could think and reason like humans across all domains; does not currently exist despite marketing claims (Edwards 2025).
Ground Truthing	Archaeological method of visiting physical sites to verify satellite (remote sensing) data; used metaphorically for checking technology claims against evidence (Parcak 2025).
Hallucination	When AI systems generate false information but present it confidently as fact; inherent to current language model (text prediction) technology, not a bug to be fixed (Edwards 2023).
Hype Cycle	Pattern where emerging technologies are oversold during initial excitement, crash when reality sets in, then eventually find appropriate applications (Imler 2025).
Large Language Model (LLM)	AI systems trained on vast amounts of text to predict what words come next; essentially "super-duper autocomplete" rather than thinking systems (Lee 2023).
Pattern Matching	How AI systems recognize similarities between new inputs and training data without genuine understanding or reasoning (Imler 2025).
Bubble Economics	When investment and speculation in a technology far exceed its actual value creation or sustainable business models (Zitron 2025).
Synthetic Text	Content generated by AI that mimics human writing but lacks genuine understanding or verification of factual accuracy (Bender 2023).